Following the survey in 1914, additional work was done, the cost of which was as follows:

During 1914:

Labor	$139.50
Oil	50.00
Ditching	450.00
Miscellaneous	86.00
Total	725.50

For the year 1915 the cost was:

Labor for draining and filling	$126.80
Oil	10.00
Miscellaneous	7.00
Total	143.80

Results of antimalarial measures.—The number of cases for the last four months of 1913 were 44, as compared with 144 for the same period of the previous year, 1912. For 1914 the number was 40 per cent less than for the year 1913; and for the year 1915, 17.6 per cent less than for the year 1914.

Blood examinations gave for May, 1914, May being the beginning of the malarial season, 11.76 per cent carriers of the parasite, and for April, 1915, 3.79 per cent, a reduction in the incidence of carriers of 67.7 per cent in the one year.

Mr. Hughes, the manager of the lumber mills, stated recently that no family had moved from Electric Mills during the year 1915; that the superintendent of schools reported the average attendance as unusually good; that the people were happy and healthy; that the labor efficiency was most satisfactory; and that these conditions were only to be attributed to the sanitation directed against typhoid and malarial fevers.

Credit is due to Dr. Cecil Champenois in carrying out the measures known to be effective in the control of these diseases.

PLAGUE-PREVENTION WORK.

CALIFORNIA.

The following report of plague-prevention work in California for the week ended February 19, 1916, was received from Surg. Boggess, of the United States Public Health Service, in charge of the work.

SAN FRANCISCO, CAL.

RAT PROOFING.

New buildings:	
Inspections of work under construction	184
Basements concreted (square feet, 48,760)	51
Floors concreted (square feet, 199,430)	34
Yards, passageways, etc. (square feet, 26,993)	97
Total area of concrete laid (square feet)	275,183
Class A, B, and C (fireproof) buildings:	
Inspections made	103
Roof and basement ventilators, etc., screened	299
Wire screening used (square feet)	1,478
Openings around pipes, etc., closed with cement	329
Sidewalk lens lights replaced	600
Old buildings:	
Inspections made	402
Wooden floors removed	34
Cubic feet new foundation walls installed	4,280
Concrete floors installed (square feet, 15,894)	20
Basements concreted (square feet, 6,403)	11
Yards and passageways, etc., concreted (square feet, 5,389)	27
Total area concrete laid (square feet)	27,686
Floors rat proofed with wire cloth (square feet, 7,220)	7
Buildings razed	17
New garbage cans stamped approved	375
Nuisances abated	243

SAN FRANCISCO, CAL.—Continued.

OPERATIONS ON THE WATER FRONT.

Vessels inspected for rat guards	21
Reinspections made on vessels	19
New rat guards procured	5
Defective rat guards repaired	4
Rats trapped on wharves and water front	26
Rats trapped on vessels	40
Traps set on wharves and water front	183
Traps set on vessels	41
Vessels trapped on	14
Poisons placed on water front (pieces)	3,600
Poisons placed within Panama-Pacific International Exposition grounds	38,000
Bait used on water front and vessels (bacon, pounds)	6
Bread used in poisoning water front (loaves)	9
Poison used on water front (pounds)	3

RATS COLLECTED AND EXAMINED FOR PLAGUE.

San Francisco:	
Collected	386
Examined	312
Found infected	None.
Hollister:	
Collected	2
Examined	2
Found infected	None.

RATS IDENTIFIED.

Mus norvegicus	209
Mus rattus	86
Mus alexandrinus	56
Mus musculus	35

Operations are being carried on on lands owned by the People's Water Co. as follows:

Contra Costa County tract.	Acres treated.		Material used.		
	Kilmol.	Grain.	Kilmol.	Grain.	Waste balls.
			Gallons.	*Pounds.*	
M. Hopkins	110	.....	29	.....	1,581
Fortier	.....	350	.....	300	.....

RECORD OF PLAGUE INFECTION.

Places in California.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number rodents found infected since May, 1907.
Cities:				
San Francisco	Jan. 30, 1908	Oct. 23, 1908	(1)	398 rats.
Oakland	Aug. 9, 1911	Dec. 1, 1908	(1)	126 rats.
Berkeley	Aug. 28, 1907	(1)	(1)	None.
Los Angeles	Aug. 11, 1908	(1)	Aug. 21, 1908	1 squirrel.
Counties:				
Alameda (exclusive of Oakland and Berkeley).	Sept. 24, 1909	Oct. 17, 1909[2]	July 12, 1915	287 squirrels, 1 wood rat.
Contra Costa	July 13, 1915	(1)	Nov. 12, 1915	1,597 squirrels.
Fresno	(1)	(1)	Oct. 27, 1911	1 squirrel.
Merced	(1)	(1)	July 12, 1911	5 squirrels.
Monterey	(1)	(1)	Apr. 10, 1914	6 squirrels.
San Benito	June 4, 1913	(1)	Aug. 14, 1915	50 squirrels.
San Joaquin	Sept. 18, 1911	(1)	Aug. 26, 1911	18 squirrels.
San Luis Obispo	(1)	(1)	Jan. 29, 1910	1 squirrel.
Santa Clara	Aug. 31, 1910	(1)	July 23, 1913	25 squirrels.
Santa Cruz	(1)	(1)	May 17, 1910	3 squirrels.
Stanislaus	(1)	(1)	June 2, 1911	13 squirrels.

[1] None. [2] Wood rat.

The work is being carried on in the following-named counties: Alameda, Contra Costa, San Francisco, Stanislaus, San Benito, Monterey, Lassen, and Modoc.

WASHINGTON—SEATTLE—PLAGUE ERADICATION.

The following report of plague-eradication work at Seattle for the week ended February 12, 1916, was received from Surg. Lloyd, of the United States Public Health Service, in charge of the work:

RAT PROOFING.

New buildings inspected	9
New buildings reinspected	22
New buildings reinspected (concrete foundations)	29
New buildings elevated	2
Buildings razed	2

LABORATORY AND RODENT OPERATIONS.

Dead rodents received	16
Rodents trapped and killed	261
Rodents recovered after fumigation	12
Total	289
Rodents examined for plague infection	185
Bodies examined for plague infection	8

CLASSIFICATION OF RODENTS.

Mus rattus	7
Mus alexandrinus	51
Mus norvegicus	149
Mus musculus	70
Unclassified	12

WATER FRONT.

Vessels inspected and histories recorded	12
Vessels fumigated	1
Sulphur used, pounds	1,100
New rat guards installed	16
Defective rat guards repaired	9
Fumigation certificates issued	1
Port sanitary statements issued	34

The usual day and night patrol was maintained to enforce rat guarding and fending.

MISCELLANEOUS WORK.

Rat-proofing notices sent to contractors, new buildings	6
Letters sent in re rat complaints	2
Lectures on sanitary measures	2
New restaurants inspected	10

RODENTS EXAMINED IN EVERETT.

Mus norvegicus trapped	32
Mus norvegicus found dead	1
Mus musculus trapped	1
Total	34
Rodents examined for plague infection	34
Rodents proven plague infected	None.

HAWAII—PLAGUE PREVENTION.

The following reports of plague-prevention work in Hawaii were received from Surg. Trotter, of the United States Public Health Service:

Honolulu.

WEEK ENDED FEB. 12, 1916.

Total rats and mongoose taken	373
Rats trapped	358
Mongoose trapped	6
Rats killed by sulphur dioxide	9
Examined microscopically	316
Showing plague infection	None.
Classification of rats trapped:	
Mus alexandrinus	163
Mus musculus	67
Mus norvegicus	109
Mus rattus	19
Classification of rats killed by sulphur dioxide:	
Mus rattus	9
Average number of traps set daily	894

Cost per rat destroyed, 2½ cents.

Last case rat plague, Aiea, 9 miles from Honolulu, Apr. 12, 1910.

Last case human plague, Honolulu, July 12, 1910.

Last case rat plague, Paauhau, Hawaii, Jan. 18, 1916.

Last case human plague, Paauhau plantation, Hawaii, Dec. 16, 1915.

Hilo.

WEEK ENDED JAN. 29, 1916.

Rats and mongoose taken	2,735
Rats trapped	2,692
Mongoose taken	43
Rats and mongoose examined microscopically	2,735
Rats and mongoose plague infected	None.
Classification of rats trapped and found dead:	
Mus norvegicus	416
Mus alexandrinus	432
Classification of rats trapped and found dead—Continued.	
Mus rattus	829
Mus musculus	1,015

Last case of rat plague, Paauhau Sugar Co., Jan. 18, 1916.

Last case of human plague, Paauhau Sugar Co., Dec. 16, 1915.